

Amendments to the Claims

1-70. (Canceled)

71. (Previously presented) A method of stimulating growth of stromal cells in a human, the method comprising the step of administering to the human an effective amount of a human stem cell factor (SCF) polypeptide and optionally a pharmaceutically acceptable carrier.

72. (Currently amended) The method of claim 71 wherein the stem cell factor (SCF) polypeptide is selected from the group consisting of amino acids 1-162, 1-164, and 1-165 as set out in Figure 15C SEQ ID NO: 46, said polypeptide optionally consisting of an N-terminal methionine.

73. (Currently amended) The method of claim 71 wherein the stem cell factor polypeptide is selected from the group consisting of amino acids ~~1-100, 1-110, 1-120, 1-123, 1-127,~~ 1-130, 1-133, 1-137, 1-141, 1-145, 1-148, 1-152, 1-156, 1-157, 1-158, 1-159, 1-160, 1-161, 1-163, 1-166, 1-168, 1-173, 1-178, 2-164, 2-165, 5-164, 11-164, 1-180, 1-183, 1-185, 1-188, 1-189, 1-220, and 1-248 as set out in Figures 42A-C SEQ ID NO 61, said polypeptide optionally consisting of an N-terminal methionine.

74. (Currently amended) The method of claim 71 wherein the stem cell factor polypeptide is selected from the group consisting of amino acids 1-152, 1-157, 1-160, 1-161, and 1-220 as set out in Figure 44A-C SEQ ID NO 63, said polypeptide optionally consisting of an N-terminal methionine.

75. (Previously presented) The method of claim 71 wherein the stem cell factor is covalently conjugated to a water-soluble polymer.

76. (Previously presented) The method of claim 75 wherein the water-soluble polymer is polyethylene glycol.

77. (Previously presented) The method of claim 72, 73 or 74 wherein the stem cell factor is co-administered with at least one other cytokine.

78. (Currently amended) The method of claim 77 wherein one or more cytokines are selected from a group consisting of IL interleukin-1, IL interleukin-2, IL interleukin-3, IL interleukin-4, IL interleukin-5, IL interleukin-6, IL interleukin-7, IL interleukin-8, IL interleukin-9, IL interleukin-10, IL interleukin-11, IL interleukin-12, erythropoietin (EPO), granulocyte colony stimulating factor (G-CSF) G-CSF, Macrophage Colony Stimulating Factor (M-CSF) M-CSF, granulocyte-monocyte colony stimulating factor (GM-CSF) GM-CSF, insulin growth factor-1 (IGF-1) IGF-1, and leukemia inhibitory factor (LIF) LIF.

79. (Previously presented) The method of claim 75 wherein the stem cell factor is co-administered with at least one other cytokine.

80. (Currently amended) The method of claim 79 wherein the cytokine is selected from a group consisting of IL interleukin-1, IL interleukin-2, IL interleukin-3, IL interleukin-4, IL interleukin-5, IL interleukin-6, IL interleukin-7, IL interleukin-8, IL interleukin-9, IL interleukin-10, IL interleukin-11, IL interleukin-12, erythropoietin (EPO) EPO, granulocyte colony stimulating factor (G-CSF) G-CSF, Macrophage Colony Stimulating Factor (M-CSF) M-

CSF, granulocyte-monocyte colony stimulating factor (GM-CSF) GM-CSF, insulin growth factor-1 (IGF-1) IGF-1, and leukemia inhibitory factor (LIF) LIF.

81. (Previously presented) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for topical delivery.

82. (Previously presented) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for oral delivery.

83. (Previously presented) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for parenteral delivery.

84. (Previously presented) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for pulmonary delivery.

85. (Previously presented) The method of claim 71 wherein the pharmaceutically acceptable carrier is suitable for nasal delivery.

86. (Previously presented) The method of claim 75 wherein the pharmaceutically acceptable carrier is suitable for topical delivery.

87. (Previously presented) The method of claim 75 wherein the pharmaceutically acceptable carrier is suitable for oral delivery.

88. (Previously presented) The method of claim 75 wherein the pharmaceutically acceptable carrier is suitable for parenteral delivery.

89. (Previously presented) The method of claim 75 wherein the pharmaceutically acceptable carrier is suitable for pulmonary delivery.

90. (Previously presented) The method of claim 75 wherein the pharmaceutically acceptable carrier is suitable for nasal delivery.